

Notice of Allowability

Application No.

09/856,561

Applicant(s)

LI ET AL.

Examiner

Art Unit

Medina A. Ibrahim

1638

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the telephonic interview of 12/20/05.
2. ☒ The allowed claim(s) is/are 6, 10, and 14-15, renumbered as 1-4, respectively.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Christopher J. Walsh on 12/20/05.

The application has been amended as follows:

In The Abstract:

The abstract of 05/23/01 has been replaced with the following:

-----A cadmium and zinc hyperaccumulating subspecies from *Thlaspi caerulescense* and methods for removing or recovering cadmium and zinc from soils by cultivating the *Thlaspi caerulescense* subspecies on soils containing cadmium and zinc-
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In The Claims:

Claim 6 (Currently amended). A method of recovering cadmium and/or zinc from arable soil containing cadmium and/or zinc, comprising:

(a) cultivating in said arable soil at least one *Thlaspi caerulescens* plant that accumulates from about 1000 to about 6000 [2600] mg cadmium/kg in above-ground tissues on [a] dry weight basis and/or from about 15,000 to about 30,000 mg zinc/kg in above - ground tissues on [a] dry weight basis under conditions sufficient to permit said

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at least one *Thlaspi caerulescens* plant to accumulate such amounts of cadmium and/or zinc; and

(b) recovering the accumulated cadmium and/or zinc; wherein said at least one *Thlaspi caerulescens* plant is *Thlaspi caerulescens* genotype G15, [the] seed[s] of which have been deposited under ATCC Accession No: [.] 203439.

Claim 10 (Currently amended). An isolated *Thlaspi caerulescens* plant cultivated on [cadmium - and/or zinc-containing] arable soil [that accumulates cadmium] containing cadmium and/or zinc, said plant accumulates in above-ground tissues cadmium at a concentration of from about 100 mg/kg [dry weight of said tissue] to about 6000 [2600] mg/kg dry weight of said tissues and/or [accumulates] zinc [in above ground tissue] at a concentration of from about 5000 mg/kg [dry weight of said tissue] to about 30,000 [26,000] mg/kg dry weight of said tissues, wherein said plant is *Thlaspi caerulescens* genotype G15, seed of which have been deposited under ATCC Accession No: 203439.

At claim 14, "No." is replaced with ---No:---.

Claim 15 (Currently amended). Cultivated *Thlaspi caerulescens* genotype G15, [the] seed[s] of which have been deposited under ATCC Accession No: [.] 203439.

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Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Medina A. Ibrahim whose telephone number is (571) 272-0797. The Examiner can normally be reached Monday -Thursday from 8:00AM to 5:30PM and every other Friday from 9:00AM to 5:00 PM. Before and after final responses should be directed to fax nos. (703) 872-9306 and (703) 872-9307, respectively.

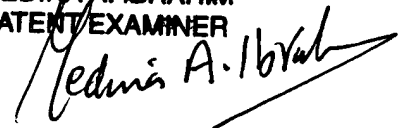
If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Dr. Amy Nelson, can be reached at (571) 272-0804.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

12/26/05

Mai

MEDINA A. IBRAHIM
PATENT EXAMINER

A handwritten signature in black ink, appearing to read "Medina A. Ibrahim", is written over the printed name and title.